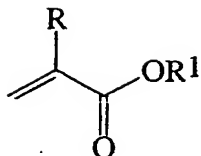


Patent Claims

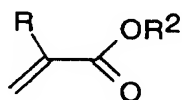
1. Polymer dispersion having high stability,  
comprising
  - A) at least one dispersed polyolefin,
  - B) at least one dispersing component,
  - C) mineral oil and
  - D) at least one compound comprising  
(oligo)oxyalkyl groups.
2. Polymer dispersion according to Claim 1,  
characterized in that the component B) represents  
a copolymer which comprises one or more blocks A  
and one or more blocks X, the block A representing  
olefin copolymer sequences, hydrogenated  
polyisoprene sequences, hydrogenated copolymers of  
butadiene/isoprene or hydrogenated copolymers of  
butadiene/isoprene and styrene, and the block X  
representing polyacrylate-, polymethacrylate-,  
styrene-,  $\alpha$ -methylstyrene [sic] or N-vinyl-  
heterocyclic sequences and/or sequences of  
mixtures of polyacrylate-, polymethacrylate-,  
styrene-,  $\alpha$ -methylstyrene [sic] or N-vinyl-  
heterocycles.
3. Polymer dispersion according to Claim 1 or 2,  
characterized in that the component B) is  
obtainable by graft copolymerization of a monomer  
composition comprising (meth)acrylates and/or  
styrene compounds onto polyolefins according to  
component A).
4. Polymer dispersion according to Claim 3,  
characterized in that a monomer composition is  
used, comprising one or more (meth)acrylates of  
the formula (I)



(I),

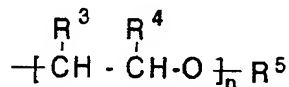
in which R denotes hydrogen or methyl and R<sup>1</sup> denotes hydrogen or a linear or branched alkyl radical having 1 to 40 carbon atoms,

and/or one or more (meth)acrylates of the formula (II)



(II),

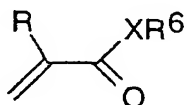
in which R denotes hydrogen or methyl and R<sup>2</sup> denotes an alkyl radical substituted by an OH group having 2 to 20 carbon atoms or denotes an alkoxyated radical of the formula (III)



(III),

in which R<sup>3</sup> and R<sup>4</sup> independently represent hydrogen or methyl, R<sup>5</sup> represents hydrogen or an alkyl radical having 1 to 40 carbon atoms and n represents an integer from 1 to 90,

and/or one or more (meth)acrylates of the formula (IV)



(IV),

in which R denotes hydrogen or methyl, X denotes oxygen or an amino group of the formula -NH- or -Nr<sup>7</sup>-, in which R<sup>7</sup> represents an alkyl radical having 1 to 40 carbon atoms, and R<sup>6</sup> denotes a linear or branched alkyl radical substituted by at

least one  $-NR^8R^9$  group and having 2 to 20, preferably 2 to 6, carbon atoms,  $R^8$  and  $R^9$ , independently of one another, representing hydrogen, an alkyl radical having from 1 to 20, preferably from 1 to 6 [lacuna] or in which  $R^8$  and  $R^9$ , including the nitrogen atom and optionally a further nitrogen or oxygen atom, form a 5- or 6-membered ring which may optionally be substituted by  $C_1-C_6$ -alkyl.

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5. Polymer dispersion according to Claim 2, 3 or 4, characterized in that a monomer composition which comprises dispersing monomers is used in the grafting reaction.

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6. Polymer dispersion according to any of Claims 2 to 5, characterized in that the weight ratio of the blocks A to the blocks X is in the range from 20:1 to 1:20.

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7. Polymer dispersion according to one or more of the preceding claims, characterized in that the component A) comprises one or more olefin copolymers.

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8. Polymer dispersion according to one or more of the preceding claims, characterized in that the component D) comprises at least one ethoxylated alcohol.

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9. Polymer dispersion according to Claim 8, characterized in that the ethoxylated alcohol comprises from 2 to 8 ethoxy groups, the hydrophobic radical of the alcohol comprising from 4 to 22 carbon atoms.

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10. Polymer dispersion according to one or more of the preceding claims, characterized in that the

polymer dispersion comprises from 2 to 40% by weight of component C).

- 5 11. Polymer dispersion according to one or more of the preceding claims, characterized in that the weight ratio of component C) to component D) is in the range from 2:1 to 1:25.
- 10 12. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises at least 20% by weight of the component A).
- 15 13. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises from 2 to 40% by weight of the components D).
- 20 14. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises a compound which has a dielectric constant greater than or equal to 9.
- 25 15. Polymer dispersion according to Claim 14, characterized in that the compound having a dielectric constant greater than or equal to 9 is selected from water, ethylene glycol, polyethylene glycol and/or alcohol.
- 30 16. Polymer dispersion according to one or more of the preceding claims, characterized in that the polymer dispersion comprises up to 30% by weight of component B).
- 35 17. Process for the preparation of polymer dispersions according to any of Claims 1 to 16, characterized in that the component A) is dispersed in a solution of components B) with application of

shear forces at a temperature in the range from 80 to 180°C.

- 5      18. Use of a polymer dispersion according to any of Claims 1 to 16 as an additive for lubricating oil formulations.